Access, delivery and perceived efficacy of physiotherapy and use of complementary and alternative therapies by people with progressive multiple sclerosis in the United Kingdom: an online survey

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Title: Access, delivery and perceived efficacy of physiotherapy and use of complementary and alternative therapies by people with progressive multiple sclerosis in the United Kingdom: an online survey.

Abstract

Introduction: All people with progressive MS in the United Kingdom should have access to physiotherapy through the National Health Service (NHS). However levels of access and delivery are unknown. Furthermore there is no research on perceived efficacy of physiotherapy or the use of complementary and alternative medicine in people with progressive MS in the United Kingdom.

Methods: An online survey was carried out via the UK MS Register. Inclusion criteria were diagnosis of progressive MS, a member of UK MS Register and 18 years or older. The survey asked participants regarding access and delivery of physiotherapy; perceived efficacy of physiotherapy and interventions received; barriers to accessing physiotherapy and use of complementary and alternative medicine. The following additional data were supplied from the UK MS Register: demographics, EQ5D, MSIS-29 physical and psychological sub-scales and geographical data.

Results: Total number of respondents was 1,298 from an identified 2,538 potential registrants: 87% could access physiotherapy services, 77% received physiotherapy from the NHS and 32% were currently receiving physiotherapy. The most common interventions received were home exercise programme (86%), exercises with a physiotherapist (74%) and advice/education (67%). 40% had recently used complementary and alternative medicine.

Perceived efficacy of physiotherapy was high with 70% reporting it to be either 'beneficial' or 'very beneficial'. Main barriers to accessing physiotherapy were mobility, fatigue, continence, transport issues, requiring someone to go with them and pain.

Discussion: Access to physiotherapy was high with most people reporting it as beneficial. However 13% reported not have access indicating a gap in accessibility. Considering some of the barriers reported may allow physiotherapy services to address this gap in accessibility.

Keywords

Progressive Multiple Sclerosis; Physiotherapy; Access; Rehabilitation; Complementary Therapies

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Highlights

- Access to physiotherapy was high at 87% and approximately a third were currently receiving physiotherapy
- Physiotherapy was considered to be beneficial
- Main barriers to accessing physiotherapy were mobility, fatigue, continence, transport issues, needing someone to go with them and pain
- Thirty eight percent had recently used complementary and alternative therapies

Abbreviations

EQ-5D-3L: EQ-5D-3L Health Questionnaire; MS: multiple sclerosis; MSIS-29: Multiple Sclerosis Impact Scale version 2; NHS: National Health Service; SD: Standard Deviation

1.0 Introduction

In the United Kingdom there are an estimated 130,000 people living with multiple sclerosis (Mackenzie et al., 2014). Approximately 15% of new cases are diagnosed as primary progressive multiple sclerosis, 5% as progressive relapsing multiple sclerosis and 80% as relapsing remitting multiple sclerosis. Around two thirds of those with relapsing remitting multiple sclerosis will however, go on to develop secondary progressive multiple sclerosis (Miller and Leary, 2007). Due to the lack of pharmacological treatments for decreasing disease activity in those with progressive forms of multiple sclerosis, treatment often focuses on symptomatic management and rehabilitation. To that effect, the International Progressive MS Alliance has named rehabilitation of as one of its research priorities for progressive multiple sclerosis (Fox et al., 2012).

For people with progressive multiple sclerosis in the United Kingdom, access to physiotherapy via the National Health Service is recommended in guidelines produced by the National Institute for Health and Care Excellence (NICE, 2014) and is part of the Healthcare Improvement Scotland neurological clinical standards (Healthcare Improvement Scotland, 2009). However, poor patient satisfaction with access to multiple sclerosis physiotherapy services has been reported in several areas of the United Kingdom (Edmonds et al., 2007; MacLurg et al., 2005; Markwick et al., 2014). In the Republic of Ireland, access to physiotherapy is reportedly lower in those from rural areas and in people with progressive multiple sclerosis compared to people with relapsing remitting multiple sclerosis (Lonergan et al., 2015). In addition, high levels of patient satisfaction with physiotherapy services have been reported in Sweden and Norway (Normann et al., 2012; Ytterberg et al., 2008).

Despite previous studies highlighting dissatisfaction with physiotherapy services in different parts of the United Kingdom the access, and use of physiotherapy services specifically by people with progressive multiple sclerosis across the whole of the United Kingdom is unknown. Furthermore, the perceived efficacy of physiotherapy services and barriers to accessing them is also unknown. In addition to traditional clinical services, people with multiple sclerosis often utilise complementary and alternative therapies in the management of their condition and whilst there is literature examining usage across the Nordic countries (46-58%) (Skovgaard et al., 2012), the United States of America (58%) (Stoll et al., 2012), Germany (67%) (Apel et al., 2006), and Turkey (26%) (Gedizlioglu et al., 2015) there is currently no information on the use of complementary and alternative therapies by people with progressive multiple sclerosis in the United Kingdom.

The objectives of this study were to: investigate access, use, delivery and perceived efficacy of physiotherapy services and interventions; determine barriers to accessing physiotherapy services; and assess use of complementary and alternative therapies by people with progressive multiple sclerosis in the United Kingdom.

2.0 Methods

2.1 Design and participant recruitment

In this cross-sectional study an online survey was carried out with participants on the UK MS Register. Registrants sign up voluntarily to the UK MS Register and provide self-reported demographic information and diagnosis of multiple sclerosis (Ford et al., 2012). Registrants answer targeted surveys and complete regular self-report measures such as the EQ-5D-3L Health Questionnaire (EQ-5D-3L) and the Multiple Sclerosis Impact Scale version 2 (MSIS-29)

(described below). Participant's data are anonymised and researchers are given secure access to the data remotely via the Secure Anonymised Information Linkage gateway (Jones et al., 2014). At the time of this study the UK MS Register had 11,041 members with 4,384 being active on the Register in the 6 months prior. In total there were 2,538 registrants who reported having a progressive form of multiple sclerosis.

Participants were eligible for inclusion to this study if they were members of the UK MS Register, aged 18 years or older, and had a progressive form of multiple sclerosis. Participants were identified by the UK MS Register and emailed informing them of the survey. The survey was conducted between August and October 2015. Informed consent was assumed if a participant completed the survey.

2.2 Data collection

The survey comprised two sections. The first contained questions related to access, delivery, perceived efficacy of physiotherapy and use of complementary and alternative therapies. The second was concerned with access to and use of multiple sclerosis specialist and clinical services. Only the first section is described here. The survey took approximately 40 minutes to complete and a copy is available upon request.

The first section asked respondents regarding access to physiotherapy; if they currently received physiotherapy for their multiple sclerosis; the referral process; their physiotherapy provider; their perceived efficacy of physiotherapy; the frequency and duration of appointments; waiting times for appointments; how and where they received physiotherapy; and barriers to receiving physiotherapy. Those who were currently receiving physiotherapy were asked what physiotherapy interventions they had received in the prior

three months and their perceived efficacy of these. Finally participants were asked which complementary and alternative therapies they had used in the prior three months. As acupuncture is delivered as a physiotherapy intervention and as a complementary and alternative therapy it was included in both questions. Questions were closed and participants were able to select answers from a list of options. In some questions participants were able to choose more than one answer. Perceived efficacy was rated on a five point scale as: 'very harmful', 'harmful', 'neither harmful nor beneficial', 'beneficial', and 'very beneficial'.

2.3 Additional data

The UK MS Register provided the following additional data: demographics; time since diagnosis; Lower Super Output Area codes for participants in England and Wales; Super Output Area codes for participants in Scotland (there were no geographical codes available for participants in Northern Ireland). The Lower Super Output Area and Super Output Area codes were converted into a classification of rural and urban living using available conversion data (Office for National Statistics, 2016; Scottish Office for National Statistics, 2016). Urban living was defined as a settlement of 10,000 people or more (Department for Communities and Local Govenment, 2006). The results from the most recent EQ-5D-3L and MSIS-29 questionnaires completed by participants were also provided. The EQ-5D-3L is a self-report measure of quality of life which generates an index ranging from -1 to 1 with a higher index indicating a higher quality of life and an index less than zero indicating a quality of life worse than death (EuroQol, 1990). The MSIS-29 version 2 is a self-report measure which considers the physical and psychological impact of multiple sclerosis in two sub-scales

ranging from 20 to 80 and 7 to 36 respectively. A higher score indicates a greater impact of multiple sclerosis (Hobart et al., 2001).

2.4 Ethical approval

Ethical approval was granted by the University of Glasgow's College of Medical, Veterinary & Life Sciences Ethics Committee and the study was peer reviewed by the information governance panel of the UK MS Register (South West - Central Bristol Research Ethics Committee, Ref: 11/SW/0160).

2.5 Statistics

Data were analysed using IBM SPSS v22. All variables were characterised using descriptive statistics. Where appropriate variables were checked for normality, since data were not normally distributed Mann-Whitney, Kruskal-Wallis and chi square tests were used as appropriate. Statistical significance was set at $p<0.05$. Where results are presented as a percentage the total number of responses for that question is reported in brackets.

3.0 Results

In total 2538 people were identified from the UK MS register as potential participants and were emailed with a link to take part in the survey. Of those, 1298 completed the survey producing a response rate of 51% (Table 1).

Table 1. Characteristics of survey responders.

Number of participants	1298
Age (years)	59 SD 8
Time since diagnosis (years)	16 SD 9
Gender	
Female	824
Male	474
Country	
Scotland	131
England	1029
Wales	104
N. Ireland	21
EQ-5D-3L index	0.49 SD 0.20
MSIS-29 –psychological sub-scale	19.96 SD 6.10
MSIS-29 – physical sub-scale	55.97 SD 12.64

Figures where applicable are mean (standard deviation (SD)). Not all participants provided geographical information. The mean time between completion of the survey and the most recent EQ-5D-3L and MSIS-29 was 39 (SD 120) and 19 (SD 111) days respectively.
EQ-5D-3L: EQ-5D-3L Health Questionnaire

Of the respondents, 87% (n=1118) had access to physiotherapy and 32% (n=414) were currently receiving physiotherapy for their multiple sclerosis (Table 2). The most common methods of referral to physiotherapy were via a multiple sclerosis specialist nurse (43%) and self-referral (38%). Approximately three quarter of participants were receiving their physiotherapy from the National Health Service and the remainder from private providers or charitable organisations. Seventy one percent received their physiotherapy at home (25%) or in a clinical environment or hospital (46%). The majority of people (80%) reported they received physiotherapy on a one to one basis. Ninety percent estimated a waiting time of 12 weeks or less after referral and over half of respondents received their physiotherapy once per week or more frequently (Table 2).

Table 2. Access, referral, and delivery of physiotherapy.

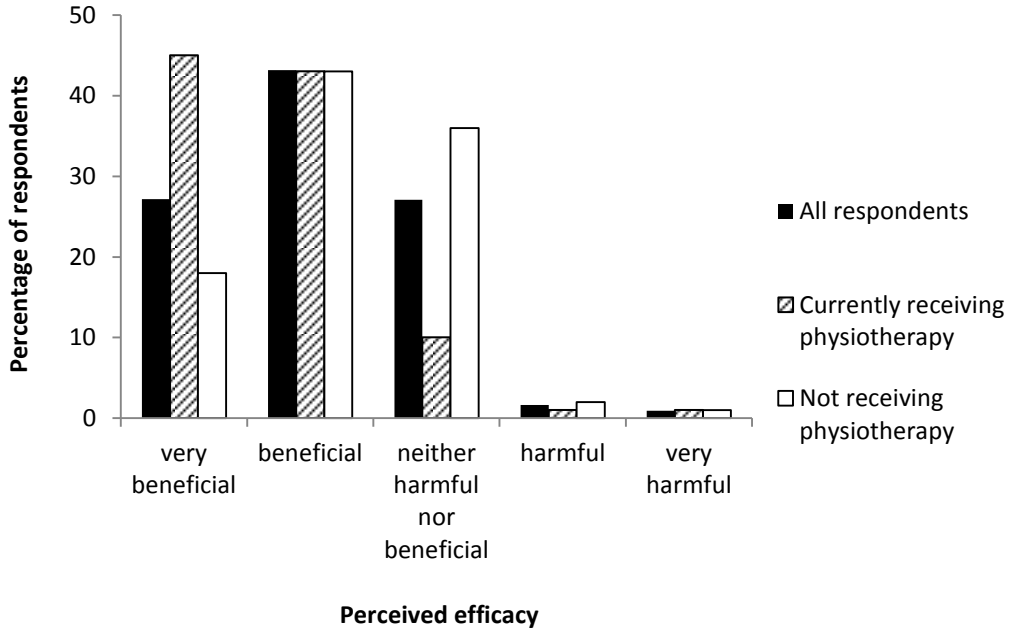
Question	Answers	n	%
Can you get physiotherapy if you want it? n=1291	yes	1118	87
	no	173	13
Are you currently receiving physiotherapy for your MS? n=1287	yes	414	32
	no	873	68
Who would you speak to to get a physiotherapy appointment? n=1158	MS specialist doctor/neurologist	310	27
	GP	366	32
	I self-refer	445	38
	MS specialist nurse	493	43
	Other	140	12
	Don't know	8	1
Who provides your physiotherapy? n=1106	National Health Service	855	77
	Private (self-funded)	207	19
	Private (insurance)	21	2
	Charity	173	16
	Other	58	5
Where do you usually receive physiotherapy? n=461	In a hospital or clinic	210	46
	At home	116	25
	In a charity centre	110	24
	In a community centre	31	7
	[a]Other	63	14
How many patients are normally present at your physiotherapy sessions? n=457	1 (individual session)	366	80
	2-4	42	9
	5 or more	81	18
	I receive physiotherapy by telephone or online	5	1
What is your usual pattern of appointments? n=451	Regularly	270	60
	Varies depending on symptoms	181	40
How long would you expect to wait for a physiotherapy appointment? n=192	< 1 week	12	6
	1 or more but less than 2 weeks	42	22
	2 or more but less than 4 weeks	36	19
	4 or more but less than 6 weeks	41	21
	6 or more less than 12 weeks	41	21
	>12 weeks	20	10
How often do you usually receive physiotherapy? n=252	once or more a week	138	55
	once a fortnight	46	18
	once every 1 to 3 months	53	21
	twice a year	10	4

	once a year or less	5	2
What is the usual length of your physiotherapy sessions? n=462	<30 minutes	120	26
	30 - 60 minutes	299	65
	>60 minutes	43	9

For some questions participants were able to select more than one option.
MS: multiple sclerosis; n: number of responses.
[a]Setting of delivery named as 'other' included: care home; private clinic; hydrotherapy pool; charity centre; leisure centre/gym.

In total 70% of respondents thought that physiotherapy was either 'beneficial' or 'very beneficial' for their multiple sclerosis, 27% were indifferent in their opinion and 3% thought that physiotherapy was 'harmful' or 'very harmful'. The perceived efficacy of physiotherapy was higher among those who were currently receiving physiotherapy for their multiple sclerosis than those who were not (p<0.001) (Figure 1). Only eight of the 31 participants with a negative opinion of physiotherapy had actually received a physiotherapy intervention in the prior three months (independent exercise (n=4), exercise with a physiotherapist (n=2) and advice/education (n=2)).

Figure 1. Perceived efficacy of physiotherapy.



The most commonly received physiotherapy interventions were; home exercise programme (86%); exercises with a physiotherapist (74%) and advice or education (67%). The perceived efficacy of all interventions was predominantly 'beneficial' or 'very beneficial'. People who received acupuncture and transcutaneous electrical nerve stimulation were less positive about the efficacy of these interventions although the opinion of these interventions was still predominantly positive (Table 3).

Table 3. Perceived efficacy of physiotherapy interventions received by respondents.

Intervention	% of total n	very harmful	harmful	neither harmful nor beneficial	beneficial	very beneficial
Home exercise programme	86	0	1	12	58	28
Exercise with physiotherapist	74	<1	<1	6	39	54
Advice/Education	67	0	<1	8	50	41
FES	25	0	3	21	29	47
Standing frame	18	0	3	8	53	37
Acupuncture	10	2	5	36	31	26
TENS	7	3	10	34	34	17
Other[a]	5	-	-	-	-	-

Total respondents n=452. All values are percentages. Participants were able to choose more than one option. n: number of respondents; FES: functional electrical stimulation; TENS: transcutaneous electrical nerve stimulation.

[a]interventions named as 'other' all had n<10 and included: hand physiotherapy, women's health physiotherapy, medication, orthotics, manual therapies, whole body vibration, and walking aid prescription.

Eighty nine percent of those receiving their physiotherapy from non- National Health Service providers had an expected waiting time of four weeks or less for a physiotherapy appointment compared to 39% of those receiving National Health Service physiotherapy (Table 4). Statistical analysis was not possible due to the small proportions of participants who felt that physiotherapy would be harmful to them.

Table 4. Expected waiting times by source of physiotherapy.

Physiotherapy provider		Expected waiting time (weeks)					
		<1	1 - 2	2- 4	4- 6	6 – 12	>12
NHS	n=133	2%	22%	15%	28%	23%	10%
Non-NHS	n= 26	27%	39%	23%	0%	12%	0%
Both	n=27	7%	11%	33%	11%	19%	19%

NHS: National Health Service; n: number of responses.

The most common barriers to receiving physiotherapy were described as: mobility (40%), fatigue (39%), continence issues (21%), transport issues (21%), and needing someone to go with them (21%). Participants were also asked to identify the three greatest barriers to receiving physiotherapy and pain was named as a barrier in addition to those listed above. Twenty three percent of respondents reported that there were no barriers to them accessing physiotherapy (Supplementary table 1).

Those who had access to physiotherapy rated their quality of life, as measured by the EQ-5D-3L index, to be significantly better compared to those who did not have access (p=0.048) (Table 5). Those who were currently receiving physiotherapy for their multiple sclerosis had a significantly lower psychological impact of multiple sclerosis, as measured by the MSIS-29 psychological sub-scale, compared to those who were not receiving physiotherapy (p=0.019). However, those who had access and those who were currently receiving physiotherapy were younger and had a shorter time since diagnosis (all p<0.05) than those who did not have access and were not receiving physiotherapy. There were no other statistically significant differences between the EQ-5D-3L index and MSIS-29 sub scale scores and physiotherapy provision (Table 5).

Table 5. Associations between access to and receiving physiotherapy and respondent demographics.

		Access to physiotherapy			Receiving physiotherapy		
Variable		n	median	*p*	n	median	*p*
EQ-5D-3L index	Yes	1089	0.57	0.048*	401	0.57	0.778
	No	167	0.50		852	0.57	
MSIS-29 phys	Yes	1113	56	0.199	411	57	0.83
	No	173	58		871	57	
MSIS-29 psych	Yes	1102	19	0.435	403	19	0.019[a]
	No	170	20		865	20	
Time since diagnosis	Yes	1082	14.5	0.034*	680	14.0	0.009[a]
	No	165	17.0		158	17.0	
Age	Yes	1118	59	<0.001*	704	59	<0.001[a]
	No	173	61		166	61	
Urban dwelling	Yes	746	-	0.418	273	-	0.913
	No	110	-		581	-	
Rural dwelling	Yes	330	-		125	-	
	No	57	-		260	-	

n: number of responses; EQ-5D-3L: EQ-5D-3L Health Questionnaire; MSIS-29 – phys: Multiple Sclerosis Impact Scale physical sub-scale; MSIS-29 – psych: Multiple Sclerosis Impact Scale psychological sub-scale; PPMS: Primary Progressive Multiple Sclerosis; SPMS: Secondary Progressive Multiple Sclerosis.
[a]Statistically significant from Mann-Whitney test.

In total 38% (n=462) of respondents had used complementary and alternative therapies for their multiple sclerosis in the prior three months (Table 6). The three most commonly used complementary and alternative therapies were massage (17%), reflexology (12%) and relaxation or meditation (10%).

Table 6. Complementary and alternative therapies used in the prior three months.

Complementary and alternative medicine	n	%
Massage	207	17
Reflexology	146	12
Relaxation or meditation	123	10
Hyperbaric oxygen therapy	85	7
Acupuncture or acupressure	72	6
Osteopathy or chiropractic	58	5
Homeopathy or herbal medicine	40	3
Reiki	33	3
Aromatherapy	32	3
Magnet field therapy	9	<1
The Alexander technique	7	<1
Other	29	2
None	747	62

Total responders n=1209, participants were able to choose more than one option.
Complementary and alternative medicines named as 'other' (all n<7): action potential stimulation; bee venom; Bowen technique; 'circulation booster'; craniosacral therapy; diet management; low dose Naltrexone; 'muscle activation therapy'; SCENAR device; and supplements.

4.0 Discussion

This was the largest United Kingdom based survey of solely people with progressive multiple sclerosis and the first to explore access, delivery and efficacy of physiotherapy services in this patient group in the United Kingdom. Access to physiotherapy in this sample was high (87%), with approximately one third currently receiving physiotherapy for their multiple sclerosis. A recent survey of people with all types of multiple sclerosis in the United Kingdom found 17% of respondents did not have access (MS Society, 2016b). This is similar to the present results in which 13% of respondents did not have access to physiotherapy services. In addition the MS Society report suggested 32% of people with multiple sclerosis were receiving physiotherapy from non-National Health Service providers, compared to 42% in the present study. Although the results are similar, the slight discrepancies may be explained by differences in multiple sclerosis sub-type. The present study focussed on

people with progressive forms of multiple sclerosis who may have a greater need of physiotherapy.

The most common setting of physiotherapy delivery was in a hospital or clinical environment (46%). This is in line with another report from the MS Society which, whilst calling for more community based care, found that the majority of multiple sclerosis care is delivered in the hospital setting (MS Society, 2016a).

In the United Kingdom, target waiting times for therapies, not specifically physiotherapy, range from 14-21 weeks (JJ Consulting, 2011). Overall 90% of this sample reported an expected waiting time for a physiotherapy appointment of 12 weeks or less. However, expected waiting times varied depending on service provider: 89% of those receiving their physiotherapy only from non-National Health Service providers reported an expected waiting time of just four weeks or less compared to 39% of those receiving their physiotherapy from the National Health Service. The overall result (90% waiting 12 weeks or less to see a physiotherapist) is different from a United Kingdom wide report by the Chartered Society of Physiotherapy which reported that 83% of neurology outpatients were seen by a Neurology physiotherapist in eight weeks or less (JJ Consulting, 2011). Differences may be due to this sample being made up solely of people with progressive multiple sclerosis and the question asked was in regard to expected waiting times.

Respondents were generally positive in their opinion of physiotherapy with 70% of respondents reporting it to be either 'beneficial' or 'very beneficial' to them. Indeed only 3% thought that physiotherapy had a negative effect. The most commonly received interventions were also perceived to be the most beneficial. All of the physiotherapy interventions which participants received, apart from acupuncture, have evidence to

support their effectiveness in people with progressive multiple sclerosis (Campbell et al., 2015).

The three most common interventions received, home exercise programme, exercise with a physiotherapist and advice, were also reported as being the most beneficial. Our previous systematic review found strong evidence to support the use of exercise to improve mobility and function in multiple sclerosis (Campbell et al., 2015). In addition patient education has been found to increase disease knowledge in patients with multiple sclerosis (Kopke et al., 2014). One intervention, transcutaneous electrical nerve stimulation, was generally reported to be beneficial although 13% reported it to be potentially harmful. This negative opinion is in contrast with two systematic reviews which concluded that transcutaneous electrical nerve stimulation was both safe and effective for treating spasticity (Fernandez-Tenorio et al., 2016) and pain (Sawant et al., 2015) in multiple sclerosis although the type of multiple sclerosis may have an impact upon efficacy (Sawant et al., 2015).

The most commonly reported and greatest barriers to accessing physiotherapy can be categorised as logistical (transport issues, needing someone to go with them) and symptomatic (mobility, fatigue, continence and pain). A study by Asano et al. found similar barriers to participating in exercise in people with multiple sclerosis (Asano et al., 2013). An increase in care close to home could address the logistical barriers and potentially reduce the impact of the symptomatic barriers. Indeed the recent report from the UK MS Society called for more community based care (MS Society, 2016a). Simple solutions such as the timing of appointments to address fatigue and ensuring adequate and clearly signposted toilet facilities to address concerns with continence may also be considered.

Having access to physiotherapy was associated with better quality of life and currently receiving physiotherapy was associated with less of a psychological impact of multiple sclerosis but not physical impact. As this was a cross-sectional study it was not possible to draw causality between these variables. Having access to, or receiving, physiotherapy was not associated with urban or rural dwelling. This is in contrast to research conducted in the Republic of Ireland which found a lack of access to physiotherapy in people with multiple sclerosis from rural areas (MacLurg et al., 2005). A greater proportion of Ireland's population does however live rurally (37% compared to 18% in the United Kingdom) which may account for the differences in results (World Data Bank, 2016).

Thirty eight percent of this sample had used a complementary and alternative therapy in the past three months for their multiple sclerosis. This result was lower than complementary and alternative therapies use in Germany (67%) (Apel et al., 2006), the United States of America (58%) (Stoll et al., 2012) and the Nordic countries (46-58%) (Skovgaard et al., 2012) but higher than complementary and alternative therapies use in Turkey (26%) (Gedizlioglu et al., 2015). The majority of the participants in the studies which reported higher complementary and alternative therapies usage had relapsing remitting multiple sclerosis and were mildly or moderately affected. In addition, a study in Germany found that the majority of complementary and alternative therapies use by people with multiple sclerosis happens in the early stages of the disease as initially they explore all avenues (Kochs et al., 2014). As the participants in this sample had a mean time since diagnosis of 16 years this may explain why complementary and alternative therapies use was lower that most of previous research where, when reported, time since diagnosis was from seven to nine years (Apel et al., 2006; Gedizlioglu et al., 2015).

4.1 Limitations

This study had a number of limitations. The cross-sectional design does not allow for causality to be drawn between associations. There was the potential for sample bias as those who engage with the UK MS Register may be more likely to seek out and engage with services. Furthermore, the diagnosis of multiple sclerosis type was self-reported, however in future the UK MS Register intends to be linked with clinical data from the National Health Service. A lack of geographical data from those in Northern Ireland meant that comparison of rural and urban dwelling in this part of the country was not possible limiting the nationwide applicability of the result. Due to the programming of the survey some participants were able to complete it without answering all of the questions and due to the low number of participants who completed the question regarding expected time to wait for an appointment this meant only 192 participants answered every single question. Subsequently percentages were calculated from the number of respondents to each question. Finally, the number of people who had access to physiotherapy was 6.5 times greater than the number of people who did not, as such results comparing these two groups should be interpreted with some caution.

5.0 Conclusion

This was the first study to focus on physiotherapy access and use by people with progressive multiple sclerosis in the United Kingdom and as such provides a unique insight. Overall this study has shown that access and perceived efficacy of physiotherapy is high in the United Kingdom amongst people with progressive multiple sclerosis. However, 13% did not have access to physiotherapy which indicates a gap in service accessibility. It is recommended that health care providers improve and increase accessibility to physiotherapy for people

with progressive multiple sclerosis by considering the barriers highlighted, for example providing care closer to home.

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5.2 Conflict of interest

The Authors declare there is no conflict of interest.

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